

**REMARKS**

Upon entry of the new claims, claims 1-36 will be pending in the above-identified application. New claims 32-36 have been added. Support for these newly added claims is found throughout the specification, including, for example, at Figures 6, 8B, 11, and 12. As such, no new matter is added by these new claims.

**Double Patenting**

The Examiner has made a request for information citing 37 C.F.R. § 1.105 and MPEP 704.11(a), subsection G. MPEP 704.11(a), subsection G relates to identification of pending or abandoned applications filed by at least one of the inventors or assigned to the same assignee as the current application that disclose similar subject matter that are not otherwise identified in the current application. Applicant points out that the present application is a continuation of U.S. Patent Application No. 10/087,153 (now U.S. Patent No. 7,040,896), which is a continuation-in-part of U.S. Patent Application No. 09/640,328 (now U.S. Patent No. 6,386,878). In effort to be fully responsive to the Examiner's request, a terminal disclaimer is being filed with this response to disclaim U.S. Patent Nos. 7,040,896 and 6,386,878.

The Examiner's request also appears to request that Applicant provide a list of related co-pending applications and related patents with specific identification of claims which may present double patenting issues with the claims of the present application. Applicant points out that such a request goes beyond the information addressed in 37 C.F.R. § 1.105 and MPEP 704.11(a), subsection G. Applicant believes that an examination of a pending application for issues of patentability, including double patenting issues, is the responsibility of the Office rather than one of the Applicant. Nevertheless, in effort to be fully responsive to the Examiner's request, Applicant has conducted a preliminary review of other commonly assigned co-pending applications and patents and, while Applicant makes no representation with respect to double patenting issues, Applicant notes that those commonly assigned, co-pending or related patents may not constitute double patenting with respect to the currently claimed invention. However, if the Examiner believes that double patenting issues exist with respect to the present application,

Applicant will readily respond to any comment made by the Examiner with respect to any specific double patenting issues that the Examiner may believe to exist with respect to claims presented in the present application.

Rejections under 35 U.S.C. §102

Claims 1-31 are rejected under 35 U.S.C. §102(e) as being clearly anticipated by Jones *et al.* (U.S. Patent No. 6,409,504). Applicant respectfully traverses the rejection.

Applicant respectfully submits that the cited reference fails to teach each and every element of the claimed invention, thereby precluding a finding of anticipation under 35 U.S.C. §102(e). Jones teaches creating a model of a patient's dentition and selecting a 2D image slice that is parallel to the dentition's occlusal plane and that intersects the tooth crown. While the modeling taught by Jones may include modeling the tooth crown and tooth root, such modeling (or any other steps taught by Jones) does not teach the elements recited in the currently claimed methods. In particular, Jones at a minimum fails to teach defining a closed cutting surface, wherein the closed cutting surface comprises a crown portion surrounding the crown of the tooth and a root portion approximating the shape of the root of the tooth, as recited in independent claims 1, 21-24, and 26. See, also, e.g., paragraph 0065, Figures 6, 8B, 11, 12 of the present application. As such, Jones fails to teach each and every element of the claimed invention including.

Applicant further points out that new claims 32-36 have been added. These new claims further clarify certain differences between the present invention and the cited reference. For example, claim 32 recites that the crown portion of the closed cutting surface comprises a volume greater than the volume of the crown of the tooth. Applicant respectfully submits that those elements are missing from the cited reference, thereby precluding a finding of anticipation.

Accordingly, Applicant respectfully requests that the rejections of claims 1-31 under 35 U.S.C. §102(e) be removed.

Appl. No. 10/633,015  
Amdt. dated June 29, 2006  
Reply to Office Action of March 29, 2006

PATENT

**CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 206-467-9600.

Respectfully submitted,

Date: 6/29/06

  
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